CLAIM AMENDEMNT

Claims 1-232 (canceled).

233. (currently amended) A method of producing a modulated beam of electromagnetic energy, comprising:

[a] providing a primary beam of electromagnetic energy having a predetermined range of wavelengths and randomly changing orientations of a chosen component of electromagnetic wave field vectors;

[b] resolving the primary beam of electromagnetic energy into a primary first resolved beam of electromagnetic energy having substantially a first selected predetermined orientation of a chosen component of the electromagnetic wave field vectors and a primary second resolved beam of electromagnetic energy having substantially a second selected predetermined orientation of a chosen component of the electromagnetic wave field vectors;

[c] rotating the second selected predetermined orientation of a chosen component of the electromagnetic wave field vectors of the primary second resolved beam of electromagnetic energy to be substantially the same as the first selected predetermined orientation of a chosen component of the electromagnetic wave field vectors of the primary first resolved beam of electromagnetic energy;

[d] separating each of the primary resolved beams of electromagnetic energy into two or more separate beams of electromagnetic energy, each of the separate beams of electromagnetic energy having a selected predetermined orientation of a chosen component of electromagnetic wave field vectors;

[e] absorbing a portion of electromagnetic energy of at least one of the two or more separate beams of electromagnetic energy at a beam stop, wherein the portion being absorbed is dependent upon the wavelength of the at least one beam;

[ef] altering the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors of a plurality of portions of each of the separate beams of electromagnetic energy by passing each of the separate beams of electromagnetic energy through a respective one of a plurality of altering means whereby the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors of the plurality of portions of each of the separate beams of electromagnetic energy is altered in response to a stimulus means

by applying a signal means to the stimulus means in a predetermined manner as each of the separate beams of electromagnetic energy passes through the respective one of the plurality of means for altering the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors;

[~~f~~g] [i] combining the altered separate beams of electromagnetic energy of the primary first resolved beam of electromagnetic energy into a first single collinear beam of electromagnetic energy without substantially changing the altered selected predetermined orientation of the chosen component of the electromagnetic wave field vectors of the plurality of portions of each of the separate beams of electromagnetic energy, and

[ii] combining the altered separate beams of electromagnetic energy of the primary second resolved beam of electromagnetic energy into a second single collinear beam of electromagnetic energy without substantially changing the altered selected predetermined orientation of the chosen component of the electromagnetic wave field vectors of the plurality of portions of each of the separate beams of electromagnetic energy; and

[g~~h~~] [i] resolving from the first single collinear beam of electromagnetic energy a first resolved beam of electromagnetic energy having substantially a first selected predetermined orientation of a chosen component of electromagnetic wave field vectors and a second resolved beam of electromagnetic energy having substantially a second selected predetermined orientation of a chosen component of electromagnetic wave field vectors, and

[ii] resolving from the second single collinear beam of electromagnetic energy a first resolved beam of electromagnetic energy having substantially a first selected predetermined orientation of a chosen component of electromagnetic wave field vectors and a second resolved beam of electromagnetic energy having substantially a second selected predetermined orientation of a chosen component of electromagnetic wave field vectors;.

~~[h] combining one of the first and second resolved beams of electromagnetic energy of the first single collinear beam of electromagnetic energy with one of the first and second resolved beams of electromagnetic energy of the second single collinear beam of electromagnetic energy to form a third collinear beam of electromagnetic energy; and~~

~~[i] rotating a selected predetermined orientation of a chosen component of the electromagnetic wave field vectors of the third collinear beam of electromagnetic energy.~~

234. (original) A method as described in claim 233 wherein step [a] includes providing a substantially collimated primary beam of electromagnetic energy.

235. (original) A method as described in claim 233 wherein step [a] includes providing a primary beam of electromagnetic energy having a rectangular cross sectional area.

236. (canceled).

237. (canceled).

238. (canceled).

239. (previously presented) A method as described in claim 233 further comprising the step of passing at least one of the resolved beams of electromagnetic energy from step [g] to a projection means.

240. (previously presented) A method as described in claim 233 further comprising the step of passing one of the resolved beams of electromagnetic energy from step [g] [i] to a first side of a projection means and passing one of the resolved beams of electromagnetic energy from step [g] [ii] to a second side of said projection means.

241. (original) A method as described in claim 233 further comprising the step of adjusting the electromagnetic spectrum of at least one of the separate beams of electromagnetic energy.

242. (original) A method as described in claim 241 wherein the step of adjusting the electromagnetic spectrum of at least one of the separate beams of electromagnetic energy includes adjusting the predetermined range of wavelengths of at least one of the separate beams of electromagnetic energy.

243. (original) A method as described in claim 241 wherein the step of adjusting the electromagnetic spectrum of at least one of the separate beams of electromagnetic energy includes adjusting the magnitude of at least one of the separate beams of electromagnetic energy.

244. (original) A method as described in claim 233 wherein step [c] includes separating each of the primary resolved beams into two or more separate beams in which each of the separate beams of electromagnetic energy has the electromagnetic spectrum different from the other separate beams of electromagnetic energy.

245. (original) A method as described in claim 244 wherein step [c] includes separating each of the primary resolved beams into two or more separate beams in which each of the separate beams of electromagnetic energy has a predetermined range of wavelengths different from the other separate beams of electromagnetic energy.

246. (previously presented) A method as described in claim 244 further comprising the step of adjusting the magnitude of at least one of the separate beams of electromagnetic energy from step [d].

247. (currently amended) A method of producing a modulated beam of light, comprising:

[a] providing a primary beam of light having a predetermined range of wavelengths and randomly changing orientations of a chosen component of electric field vectors;

[b] resolving the primary beam of light into a primary first resolved beam of light having substantially a first selected predetermined orientation of a chosen component of the electric field vectors and a primary second resolved beam of light having substantially a second selected predetermined orientation of a chosen component of the electric field vectors;

[c] rotating the second selected predetermined orientation of a chosen component of the electric field vectors of the primary second resolved beam of light

to be substantially the same as the first selected predetermined orientation of a chosen component of the electric field vectors of the primary first resolved beam of light;

[d] separating each of the primary resolved beams of light into two or more separate beams of light, each of the separate beams of light having a selected predetermined orientation of a chosen component of electric field vectors;

[e] absorbing a portion of electromagnetic energy of at least one of the two or more separate beams of light at a beam stop, wherein the portion being absorbed is dependent upon the wavelength of the at least one beam;

[ef] altering the selected predetermined orientation of the chosen component of the electric field vectors of a plurality of portions of each of the separate beams of light by passing each of the separate beams of light through a respective one of a plurality of altering means whereby the selected predetermined orientation of the chosen component of the electric field vectors of the plurality of portions of each of the separate beams of light is altered in response to a stimulus means by applying a signal means to the stimulus means in a predetermined manner as each of the separate beams of light passes through the respective one of the plurality of means for altering the selected predetermined orientation of the chosen component of the electric field vectors;

[fg] [i] combining the altered separate beams of light of the primary first resolved beam of light into a first single collinear beam of light without substantially changing the altered selected predetermined orientation of the chosen component of the electric field vectors of the plurality of portions of each of the separate beams of light, and

[ii] combining the altered separate beams of light of the primary second resolved beam of light into a second single collinear beam of light without substantially changing the altered selected predetermined orientation of the chosen component of the electric field vectors of the plurality of portions of each of the separate beams of light; and

[gh] [i] resolving from the first single collinear beam of light a first resolved beam of light having substantially a first selected predetermined orientation of a chosen component of electric field vectors and a second resolved beam of light having substantially a second selected predetermined orientation of a chosen component of electric field vectors, and

[ii] resolving from the second single collinear beam of light a first resolved beam of light having substantially a first selected predetermined orientation of a chosen component of electric field vectors and a second resolved beam of light having substantially a second selected predetermined orientation of a chosen component of electric field vectors;.

~~[h] combining one of the first and second resolved beams of light of the first single collinear beam of light with one of the first and second resolved beams of light of the second single collinear beam of light to form a third collinear beam of light; and~~

~~[i] rotating a selected predetermined orientation of a chosen component of the electric field vectors of the third collinear beam of light.~~

248. (original) A method as described in claim 247 wherein step [a] includes providing a substantially collimated primary beam of light.

249. (original) A method as described in claim 247 wherein step [a] includes providing the primary of light having a rectangular cross sectional area.

250. (canceled).

251. (canceled).

252. (canceled).

253. (previously presented) A method as described in claim 247 further comprising the step of passing at least one of the resolved beams of light from step [g] to a projection means.

254. (previously presented) A method as described in claim 247 further comprising the step of passing one of the resolved beams of light from step [g] [i] to a first side of a projection means and passing one of the resolved beams of light from step [g] [ii] to a second side of said projection means.

255. (original) A method as described in claim 247 further comprising the step of

adjusting the light spectrum of at least one of the separate beams of light.

256. (original) A method as described in claim 255 wherein the step of adjusting the electromagnetic spectrum of at least one of the separate beams of light includes adjusting the predetermined range of wavelengths of at least one of the separate beams of light.

257. (original) A method as described in claim 255 wherein the step of adjusting the electromagnetic spectrum of at least one of the separate beams of light includes adjusting a magnitude of at least one of the separate beams of light.

258. (original) A method as described in claim 247 wherein step [c] includes separating each of the primary resolved beams into two or more separate beams in which each of the separate beams of light further has the light spectrum different from the other separate beams of light.

259. (original) A method as described in claim 258 wherein step [c] includes separating each of the primary resolved beams into two or more separate beams in which each of the separate beams of light has a predetermined range of wavelengths different from the other separate beams of light.

260. (previously presented) A method as described in claim 258 further comprising the step of adjusting the magnitude of at least one of the separate beams of electromagnetic energy from step [d].

261. (currently amended) A system of producing a modulated beam of electromagnetic energy, comprising:

[a] means for providing a primary beam of electromagnetic energy having a predetermined range of wavelengths and randomly changing orientations of a chosen component of electromagnetic wave field vectors;

[b] means for resolving the primary beam of electromagnetic energy into a primary first resolved beam of electromagnetic energy having substantially a first selected predetermined orientation of a chosen component of the electromagnetic wave field vectors and a primary second resolved beam of electromagnetic energy

having substantially a second selected predetermined orientation of a chosen component of the electromagnetic wave field vectors;

[c] means for rotating the second selected predetermined orientation of a chosen component of the electromagnetic wave field vectors of the primary second resolved beam of electromagnetic energy to be substantially the same as the first selected predetermined orientation of a chosen component of the electromagnetic wave field vectors of the primary first resolved beam of electromagnetic energy;

[d] means for separating each of the primary resolved beams of electromagnetic energy into two or more separate beams of electromagnetic energy, each of the separate beams of electromagnetic energy having a selected predetermined orientation of a chosen component of electromagnetic wave field vectors;

[e] means for absorbing a portion of electromagnetic energy of at least one of the two or more separate beams of electromagnetic energy at a beam stop, wherein the portion being absorbed is dependent upon the wavelength of the at least one beam;

[ef] means for altering the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors of a plurality of portions of each of the separate beams of electromagnetic energy by passing each of the separate beams of electromagnetic energy through a respective one of a plurality of altering means whereby the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors of the plurality of portions of each of the separate beams of electromagnetic energy is altered in response to a stimulus means by applying a signal means to the stimulus means in a predetermined manner as each of the separate beams of electromagnetic energy passes through the respective one of the plurality of means for altering the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors;

[fg] [i] means for combining the altered separate beams of electromagnetic energy of the primary first resolved beam of electromagnetic energy into a first single collinear beam of electromagnetic energy without substantially changing the altered selected predetermined orientation of the chosen component of the electromagnetic wave field vectors of the plurality of portions of each of the separate beams of electromagnetic energy, and

[ii] means for combining the altered separate beams of electromagnetic energy of the primary second resolved beam of electromagnetic energy into a second single collinear beam of electromagnetic energy without

substantially changing the altered selected predetermined orientation of the chosen component of the electromagnetic wave field vectors of the plurality of portions of each of the separate beams of electromagnetic energy; and

[gh] [i] means for resolving from the first single collinear beam of electromagnetic energy a first resolved beam of electromagnetic energy having substantially a first selected predetermined orientation of a chosen component of electromagnetic wave field vectors and a second resolved beam of electromagnetic energy having substantially a second selected predetermined orientation of a chosen component of electromagnetic wave field vectors, and

[ii] means for resolving from the second single collinear beam of electromagnetic energy a first resolved beam of electromagnetic energy having substantially a first selected predetermined orientation of a chosen component of electromagnetic wave field vectors and a second resolved beam of electromagnetic energy having substantially a second selected predetermined orientation of a chosen component of electromagnetic wave field vectors;.

~~[h] means for combining one of the first and second resolved beams of electromagnetic energy of the first single collinear beam of electromagnetic energy with one of the first and second resolved beams of electromagnetic energy of the second single collinear beam of electromagnetic energy to form a third collinear beam of electromagnetic energy; and~~

~~[i] means for rotating a selected predetermined orientation of a chosen component of the electromagnetic wave field vectors of the third collinear beam of electromagnetic energy.~~

262. (original) A system as described in claim 261 in which the means for providing a primary beam of electromagnetic energy includes means for providing a substantially collimated beam of electromagnetic energy.

263. (original) A system as described in claim 261 in which the means for providing a primary beam of electromagnetic energy includes means for providing the initial beam of electromagnetic energy having a rectangular cross sectional area.

264. (canceled).

265. (canceled).

266. (canceled).

267. (previously presented) A system as described in claim 261, further comprising means for passing at least one of the resolved beams of electromagnetic energy from step [g] to a projection means.

268. (previously presented) A system as described in claim 261 further comprising means for passing one of the resolved beams of electromagnetic energy from step [g] [i] to a first side of a projection means and passing one of the resolved beams of electromagnetic energy from step [g] [ii] to a second side of said projection means.

269. (previously presented) A system as described in claim 261 further comprising means for adjusting an electromagnetic spectrum of at least one of the separate beams of electromagnetic energy.

270. (original) A system as described in claim 269 wherein the means for adjusting the electromagnetic spectrum of at least one of the separate beams of electromagnetic energy includes means for adjusting a predetermined range of wavelengths of at least one of the separate beams of electromagnetic energy.

271. (previously presented) A system as described in claim 269 wherein the means for adjusting the electromagnetic spectrum of at least one of the separate beams of electromagnetic energy includes means for adjusting a magnitude of at least one of the separate beams of electromagnetic energy.

272. (original) A system as described in claim 261 wherein the separating means includes means for separating the beams in which each of the separate beams of electromagnetic energy has an electromagnetic spectrum different from the electromagnetic spectrum of each of the other separate beams of electromagnetic energy.

273. (original) A system as described in claim 272 wherein the separating means

includes means for separating the beams in which each of the separate beams of electromagnetic energy has a predetermined range of wavelengths different from a predetermined range of wavelengths of each of the other separate beams of electromagnetic energy.

274. (previously presented) A system as described in claim 272 further comprising means for adjusting a magnitude of at least one of the separate beams of electromagnetic energy.

275. (currently amended) A system of producing a modulated beam of light, comprising:

[a] means for providing a primary beam of light having a predetermined range of wavelengths and randomly changing orientations of a chosen component of electric field vectors;

[b] means for resolving the primary beam of light into a primary first resolved beam of light having substantially a first selected predetermined orientation of a chosen component of the electric field vectors and a primary second resolved beam of light having substantially a second selected predetermined orientation of a chosen component of the electric field vectors;

[c] means for rotating the second selected predetermined orientation of a chosen component of the electric field vectors of the primary second resolved beam of light to be substantially the same as the first selected predetermined orientation of a chosen component of the electric field vectors of the primary first resolved beam of light;

[d] means for separating each of the primary resolved beams of light into two or more separate beams of light, each of the separate beams of light having a selected predetermined orientation of a chosen component of electric field vectors;

[e] means for absorbing a portion of electromagnetic energy of at least one of the two or more separate beams of light at a beam stop, wherein the portion being absorbed is dependent upon the wavelength of the at least one beam;

[ef] means for altering the selected predetermined orientation of the chosen component of the electric field vectors of a plurality of portions of each of the separate beams of light by passing each of the separate beams of light through a respective one of a plurality of altering means whereby the selected predetermined

orientation of the chosen component of the electric field vectors of the plurality of portions of each of the separate beams of light is altered in response to a stimulus means by applying a signal means to the stimulus means in a predetermined manner as each of the separate beams of light passes through the respective one of the plurality of means for altering the selected predetermined orientation of the chosen component of the electric field vectors;

[~~f~~g] [i] means for combining the altered separate beams of light of the primary first resolved beam of light into a first single collinear beam of light without substantially changing the altered selected predetermined orientation of the chosen component of the electric field vectors of the plurality of portions of each of the separate beams of light, and

[ii] means for combining the altered separate beams of light of the primary second resolved beam of light into a second single collinear beam of light without substantially changing the altered selected predetermined orientation of the chosen component of the electric field vectors of the plurality of portions of each of the separate beams of light; and

[g~~h~~] [i] means for resolving from the first single collinear beam of light a first resolved beam of light having substantially a first selected predetermined orientation of a chosen component of electric field vectors and a second resolved beam of light having substantially a second selected predetermined orientation of a chosen component of electric field vectors, and

[ii] means for resolving from the second single collinear beam of light a first resolved beam of light having substantially a first selected predetermined orientation of a chosen component of electric field vectors and a second resolved beam of light having substantially a second selected predetermined orientation of a chosen component of electric field vectors;.

~~[h] means for combining one of the first and second resolved beams of light of the first single collinear beam of light with one of the first and second resolved beams of light of the second single collinear beam of light to form a third collinear beam of light; and~~

~~[i] means for rotating a selected predetermined orientation of a chosen component of the electric field vectors of the third collinear beam of light.~~

276. (original) A system as described in claim 275 in which the means for

providing a primary beam of light includes means for providing a substantially collimated beam of light.

277. (original) A system as described in claim 275 in which the means for providing a primary beam of light includes means for providing the initial beam of light having a rectangular cross sectional area.

278. (canceled).

279. (canceled).

280. (canceled).

281. (previously presented) A system as described in claim 275 further comprising means for passing at least one of the resolved beams of light from step [g] to a projection means.

282. (previously presented) A system as described in claim 275 further comprising means for passing one of the resolved beams of light from step [g] [i] to a first side of a projection means and passing one of the resolved beams of light from step [g] [ii] to a second side of said projection means.

283. (previously presented) A system as described in claim 275 further comprising means for adjusting an electromagnetic spectrum of at least one of the separate beams of light.

284. (original) A system as described in claim 283 wherein the means for adjusting the electromagnetic spectrum of at least one of the separate beams of light includes means for adjusting a predetermined range of wavelengths of at least one of the separate beams of light.

285. (previously presented) A system as described in claim 283 wherein the means for adjusting the electromagnetic spectrum of at least one of the separate beams of light includes means for adjusting a magnitude of at least one of the separate beams of

light.

286. (original) A system as described in claim 275 wherein the separating means includes means for separating the beams in which each of the separate beams of light has an light spectrum different from the light spectrum of each of the other separate beams of light.

287. (original) A system as described in claim 286 wherein the separating means includes means for separating the beams in which each of the separate beams of light has a predetermined range of wavelengths different from a predetermined range of wavelengths of each of the other separate beams of light.

288. (previously presented) A system as described in claim 286 further comprising means for adjusting the magnitude of at least one of the separate beams of light.

Claims 289-438 (canceled).